ABSTRACT OF THE DISCLOSURE

A method for transmitting data (D) on one and the same data transmission unit (4) in a particularly simple, secure and rapid manner in accordance with various requirements. For transmitting the data (D) between data processing units (2) of a data processing system (1) via the data transmission unit (4), the data (D) is transmitted in a parallel manner in at least two protocols. The first protocol enables transmission of the data (D) in a first frequency range with a first signal sequence and a first signal level. The second protocol enables further data (D) to be transmitted in a second frequency range with a second signal sequence and a second signal level.